

**Environmental Protection Agency**

**Pt. 98, Subpt. MM, Table MM-1**

**§ 98.398 Definitions.**

Except as specified in this section, all terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

*Batch* means either a volume of crude oil that enters a refinery or the components of such volume (e.g., the volumes of different crude streams that are blended together and then delivered to a refinery). The batch volume is the first appropriate tier in the following list:

- (1) Up to an annual volume of a type of crude oil identified by an EIA crude stream code, if the EIA crude stream code is known.
- (2) Up to an annual volume of a type of crude oil identified by a generic

name for the crude stream and an appropriate EIA two-letter country or state and production area code, if the generic name and EIA two-letter code are known but no appropriate EIA crude stream code exists.

(3) Up to a calendar month of crude oil volume from a single known foreign country of origin if the crude stream name is unknown.

(4) Up to a calendar month of crude oil volume from the United States if the crude stream name and production area are unknown.

(5) Up to a calendar month of crude oil volume if the country of origin is unknown.

[75 FR 66478, Oct. 28, 2010]

TABLE MM-1 TO SUBPART MM OF PART 98—DEFAULT FACTORS FOR PETROLEUM PRODUCTS AND NATURAL GAS LIQUIDS<sup>1 2</sup>

Products	Column A: density (metric tons/ bb)	Column B: carbon share (% of mass)	Column C: emission factor (metric tons CO <sub>2</sub> /bb)
<b>Finished Motor Gasoline</b>			
Conventional—Summer			
Regular .....	0.1181	86.66	0.3753
Midgrade .....	0.1183	86.63	0.3758
Premium .....	0.1185	86.61	0.3763
Conventional—Winter			
Regular .....	0.1155	86.50	0.3663
Midgrade .....	0.1161	86.55	0.3684
Premium .....	0.1167	86.59	0.3705
Reformulated—Summer			
Regular .....	0.1167	86.13	0.3686
Midgrade .....	0.1165	86.07	0.3677
Premium .....	0.1164	86.00	0.3670
Reformulated—Winter			
Regular .....	0.1165	86.05	0.3676
Midgrade .....	0.1165	86.06	0.3676
Premium .....	0.1166	86.06	0.3679
Gasoline—Other .....	0.1185	86.61	0.3763
<b>Blendstocks</b>			
CBOB—Summer			
Regular .....	0.1181	86.66	0.3753
Midgrade .....	0.1183	86.63	0.3758
Premium .....	0.1185	86.61	0.3763
CBOB—Winter			
Regular .....	0.1155	86.50	0.3663
Midgrade .....	0.1161	86.55	0.3684
Premium .....	0.1167	86.59	0.3705
RBOB—Summer			
Regular .....	0.1167	86.13	0.3686
Midgrade .....	0.1165	86.07	0.3677
Premium .....	0.1164	86.00	0.3670
RBOB—Winter			
Regular .....	0.1165	86.05	0.3676
Midgrade .....	0.1165	86.06	0.3676
Premium .....	0.1166	86.06	0.3679
Blendstocks—Other .....	0.1185	86.61	0.3763

Pt. 98, Subpt. MM, Table MM-2

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Products	Column A: density (metric tons/ bbl)	Column B: carbon share (% of mass)	Column C: emission factor (metric tons CO <sub>2</sub> /bbl)
<b>Oxygenates</b>			
Methanol .....	0.1268	37.48	0.1743
GTBA .....	0.1257	64.82	0.2988
MTBE .....	0.1181	68.13	0.2950
ETBE .....	0.1182	70.53	0.3057
TAME .....	0.1229	70.53	0.3178
DIPE .....	0.1156	70.53	0.2990
<b>Distillate Fuel Oil</b>			
Distillate No. 1			
Ultra Low Sulfur .....	0.1346	86.40	0.4264
Low Sulfur .....	0.1346	86.40	0.4264
High Sulfur .....	0.1346	86.40	0.4264
Distillate No. 2			
Ultra Low Sulfur .....	0.1342	87.30	0.4296
Low Sulfur .....	0.1342	87.30	0.4296
High Sulfur .....	0.1342	87.30	0.4296
Distillate Fuel Oil No. 4 .....	0.1452	86.47	0.4604
Residual Fuel Oil No. 5 (Navy Special) .....	0.1365	85.67	0.4288
Residual Fuel Oil No. 6 (a.k.a. Bunker C) .....	0.1528	84.67	0.4744
Kerosene-Type Jet Fuel .....	0.1294	86.30	0.4095
Kerosene .....	0.1346	86.40	0.4264
Diesel—Other .....	0.1452	86.47	0.4604
<b>Petrochemical Feedstocks</b>			
Naphthas (< 401 °F) .....	0.1158	84.11	0.3571
Other Oils (> 401 °F) .....	0.1390	87.30	0.4450
<b>Unfinished Oils</b>			
Heavy Gas Oils .....	0.1476	85.80	0.4643
Residuum .....	0.1622	85.70	0.5097
<b>Other Petroleum Products and Natural Gas Liquids</b>			
Aviation Gasoline .....	0.1120	85.00	0.3490
Special Naphthas .....	0.1222	84.76	0.3798
Lubricants .....	0.1428	85.80	0.4492
Waxes .....	0.1285	85.30	0.4019
Petroleum Coke .....	0.1818	92.28	0.6151
Asphalt and Road Oil .....	0.1634	83.47	0.5001
Still Gas .....	0.1405	77.70	0.4003
Ethane .....	0.0866	79.89	0.2537
Ethylene .....	0.0903	85.63	0.2835
Propane .....	0.0784	81.71	0.2349
Propylene .....	0.0803	85.63	0.2521
Butane .....	0.0911	82.66	0.2761
Butylene .....	0.0935	85.63	0.2936
Isobutane .....	0.0876	82.66	0.2655
Isobutylene .....	0.0936	85.63	0.2939
Pentanes Plus .....	0.1055	83.63	0.3235
Miscellaneous Products .....	0.1380	85.49	0.4326

<sup>1</sup> In the case of products blended with some portion of biomass-based fuel, the carbon share in Table MM-1 of this subpart represents only the petroleum-based components.  
<sup>2</sup> Products that are derived entirely from biomass should not be reported, but products that were derived from both biomass and a petroleum product (i.e., co-processed) should be reported as the petroleum product that it most closely represents.

TABLE MM-2 TO SUBPART MM OF PART 98—DEFAULT FACTORS FOR BIOMASS-BASED FUELS AND BIOMASS

Biomass-based fuel and biomass	Column A: Density (metric tons/ bbl)	Column B: Carbon share (% of mass)	Column C: Emission factor (metric tons CO <sub>2</sub> /bbl)
Ethanol (100%) .....	0.1267	52.14	0.2422
Biodiesel (100%, methyl ester) .....	0.1396	77.30	0.3957